(b) As on 31.3.1994, 24 applica. tions for loan assistance amounting to Rs. 43.61 crores from IREDA are pending with IRSDA.

(c) After the project is sanctioned an independent assessment of the progress of the project from an independent chartered accountant is required to be obtained by the project promoter in each case and the same furnished to IRKDA. Inspections by the officers of IREDA to assess the implementation of all the projects are done to make recommendations regarding requirements of funds to be released. 0n the basis of the above assessment the first instalment of loan assistance i.^ released _ The above process in normally repeated before any disbursement is made subsequently. IREDA also sometime engages the service of independent experts]professionals to assess the progress of the project. Further^ the progress of the implementation of the project is also monitored through periodical reports which are required to be sent to IREDA by the project promoter and through reports of Nominee Director on the Board of the assisted companies, wherever appointed by the IREDA.

Independent evaluation of the sanctioned project is also done in some cases on its completion. The task is assigned to outside consultants.

**Bfomass *waste* to generate energy**

5969. SHRI SATISH PRADHAN: Will the PRIME MINISTER be plea !3ed to state:

(a) whether Government have any plants to use Biomas waste to gene rate energy if so. what are the details thereof;

(b) whether any experiments have been carried out to use municipal waste water and Industrial waste wa ter to generate energy, if so, the re sults thereof; and

(c) whether Government would consider substantial -aid to the Municipalities desirous of installing energy generating plants?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI S. KRISHNA KUMAR): (a) Yes, Sir schemes have been evolved for utilisation of biomass waste to generate energy in rural, urban municipal aj;d industrial sectors. A programme for development of high rate bio-methanation process to utilise such wastes lias been initiated with partial assistance from UNDP|GEF at an estimated cost of Rs. 40 crores. The programme covers the setting up of 16 numbers demonstration projects for biomethanation including utilisation of the gas besides development of institutional framework, requisite expertise and capabilities, and creation of awareness etc., adoption of suitable technologies and qualitative and quantitative potential in different sectors and preparation of a shelf of mvesr-mant proposals are included in the objectives.

(b) Experiments have been carried out through R&D organisations national laboratories and others to use municipal waste water (Sewage) and industrial waste water (effluents) to generate energy in the form of biogas. Results have shown that yield of gas to be about 0.056 m3 per m3 of sewage having BOD level of 150 mg!l. Similarly, in case of distillery waste of 45000 mg[l BOD level, about 2.5 m3 gas can be generated from 1 m3 T'.'^ste.':. Sewage treatment plants ins-ralled at six locations under the Gan-ga Action Plan have been connected with biogas recovery system. Indust-rial effluents mainly distilery effluents (about 70 numbers) which are to be treated prior to discharge have also incorporated energy recovery .system.

(c) Substantial financial assistance is already being provided to State

Govts, under various river action plans for treatment and disposal of municipal waste water including energy generation, whenever feasible beside financial assistance for selected demonstration projects under UNDP assisted programmes.

**Urjagram Scheme**

5970. SHRI RAMACHANDRAN PILLAI: Will the PRIME MINISTER be pleased to state:

(a) what are the main features of the Urjagram Scheme;

(b) what is the target for the Eighth Five Year Plan; and

(c) what is the progre^ so far achieved?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI S. KRISHNA KUMAR): (a) to (c) The Urjagram Programme aims at planned introduction of decentralised energy supply options in villages by i harnessing locally available energy resources such as solar wind bio- I mass, etc. in an integrated manner and ultimately bringing about energy self-sufnciency. Projects are taken up, in villages identified through energy surveys, and on cost sharing basis. Funds are also provided for operation and maintenance of the systems installed.

The target for the Eighth Five Year Plan is to set up 125 Urjagrams in various parts of the country and to undertake 500 Energy Surveys.

A total of 209 Urjagrams in 15 States I UTs and 1798 Energy Surveys in 21 States|UTs have been completed till 31.3.1994, out of which 54 urjagrams and 2241 surveys have been completed during the first two years of the Eighth Plan (1992—94).

However, with the transfer of the Integrated Rural Energy Programme from the Planning Commission to this Ministry from 1st April, 1994, it is proposed to merge the Urjagram Scheme wi*th* the Integrated Rural Energy Programme and recast the Programme suitably for the remaining part of the Eighth Plan.

**गुजरात में गैर-पारम्परिक ऊर्जा स्रोतों के विकास के लिये परियोजनाएं**

5971. **श्री गोपाल सिंह जो० सोलंकी :** क्या प्रधान मंत्री यह बताने की कृपा करेंगे कि :

(क) केन्द्रीय सरकार को गुजरात सरकार द्वारा 31 दिसम्बर, 1993 तक गैर-पारम्परिक ऊर्जा स्रोतों के विकास के लिये प्रस्तुत की गयी परियोजनाओं का ब्यौरा क्या है ;

(ख) जिलेवार कितनी परियोजनाओं को उक्त अवधि में स्वीकृति प्रदान की गई है ; और

(ग) शेष प्रस्तावों/परियोजनाओं को कब तक मंजूरी प्रदान किये जाने की संभावना है ?

**गैर-पारम्परिक ऊर्जा स्रोत मंत्रालय में राज्य मंत्री (श्री एस० कृष्ण कुमार) :** (क) बायोगैस, उन्नत चूल्हा और सौर कुकरों के जारी विस्तार कार्यक्रमों के अतिरिक्त गुजरात सरकार से 5 प्रस्ताव प्राप्त हुये थे जिनमें बायोमास गैसीफायर विद्युत उत्पादन प्रणालियां, पवन फार्म, सौर प्रकाशवोल्टीय तथा सौर तापीय प्रणालियों की संस्थापना और दोहरे ईंधन वाली बसें चलाना शामिल है ।

(ख) और (ग) वर्ष 1993-94 के दौरान कच्छ जिले में बायोमास गैसीफायर विद्युत उत्पादन प्रणाली और सुरेन्द्र नगर जिले में पवन फार्म परियोजना की स्थापना के लिये प्रस्तावों को मंजूरी दी गई है । सौर प्रकाशवोल्टीय घटक, जिसमें 200 सौर लालटेन शामिल हैं, को गुजरात के विभिन्न जिलों में वितरण के लिये मंजूरी दी गई है । राज्य के विभिन्न जिलों में 100 दोहरी ईंधन वाली बसें चलाने और सौर तापीय